

Application No.: 09/656,309

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**AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows.

This listing of claims will replace all prior versions, and listing, of claims in the application:

Claims 1 to 52 (canceled)

Claim 53 (previously presented): A method of generating a nucleic acid that encodes a polypeptide having a polymerase activity comprising:

obtaining a nucleic acid comprising a sequence as set forth in SEQ ID NO:1, or its complement;

modifying one or more nucleotides in said sequence to another nucleotide, deleting one or more nucleotides in said sequence, or adding one or more nucleotides to said sequence, to generate a variant nucleic acid that encodes a polypeptide having polymerase activity;

expressing the variant nucleic acid to generate a polypeptide; and

screening the polypeptide for a polymerase activity, thereby generating a nucleic acid encoding a polypeptide having a polymerase activity.

Claim 54 (currently amended): The method of claim 53, wherein the modifications are introduced by a method selected from the group consisting of error-prone PCR, shuffling, oligonucleotide-directed mutagenesis, assembly PCR, sexual PCR mutagenesis, in vivo mutagenesis, cassette mutagenesis, recursive ensemble mutagenesis, exponential ensemble mutagenesis, site-specific mutagenesis, ligation reassembly, Gene Site Saturation Mutagenesis (GSSM) Mutagenesis<sup>TM</sup> (GSSM<sup>TM</sup>) and any combination thereof.

Claim 55 (previously presented): The method of claim 53, wherein the modifications are introduced by error-prone PCR.

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Claim 56 (previously presented): The method of claim 53, wherein the modifications are introduced by shuffling.

Claim 57 (previously presented): The method of claim 53, wherein the modifications are introduced by oligonucleotide-directed mutagenesis.

Claim 58 (previously presented): The method of claim 53, wherein the modifications are introduced by assembly PCR.

Claim 59 (previously presented): The method of claim 53, wherein the modifications are introduced by sexual PCR mutagenesis.

Claim 60 (previously presented): The method of claim 53, wherein the modifications are introduced by in vivo mutagenesis.

Claim 61 (previously presented): The method of claim 53, wherein the modifications are introduced by cassette mutagenesis.

Claim 62 (previously presented): The method of claim 53, wherein the modifications are introduced by recursive ensemble mutagenesis.

Claim 63 (previously presented): The method of claim 53, wherein the modifications are introduced by exponential ensemble mutagenesis.

Claim 64 (previously presented): The method of claim 53, wherein the modifications are introduced by site-specific mutagenesis.

Claims 65 to 107 (canceled)

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